

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause 3.0 Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : _____									

Work Order ID 146207

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Item ID: D3695-3

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Stopper

Start Date: 5/20/2016 Start Qty: 10.00 *10*

Cust Item ID:

Required Date: 6/10/2016 Req'd Qty: 10.00 *10*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							DAS 14 9-89
130						8	0		16/05/30
QC	Memo	0.00							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							234 9-89
140						(8)			2016/07/12
HandFinish	Memo	0.00							BEB.
Hand Finishing									
150	Grey Sandtex(Ref:4.3,5,6) per QSI005 4.3	0.00							
150						8	0	16-08-16.	234 9-89
Powdercoat	Memo	0.00							
Powder Coating	*****MASK ALL HOLES AS PER DWG D3695***** START TIME: 9:25 OVEN TEMPERATURE: 320 FINISH TIME: 9:55								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 146207

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146207

Page 3

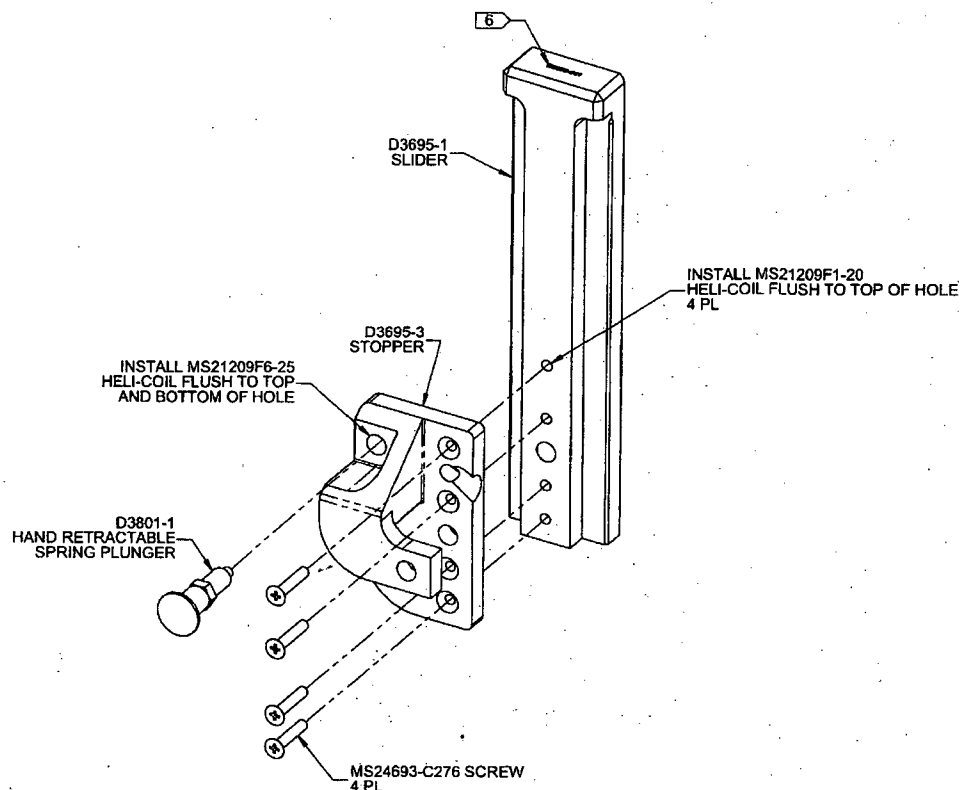
Item ID: D3695-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Stopper
Start Date: 5/20/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 6/10/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<u>8</u>			DAS 38 AUG 16 2016
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <u>ST506</u> Memo	0.00 0.00			DAS 6 9-89	<u>Ant</u> <u>8</u>	<u>PK</u>		AUG 16 2016
180 *180* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							DAS 21 9-89 AUG 17 2016 DAS 21 9-89 AUG 17 2016

20160511

SHA146207

**D3695-041 SLIDER ASSEMBLY****D3695-041 NOTES:**

- 1) MATERIAL: NONE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENT P/N "D3695-041" PER QSI 044 6.1
- 7) WEIGHT: D3695-041 = 0.63 lbs

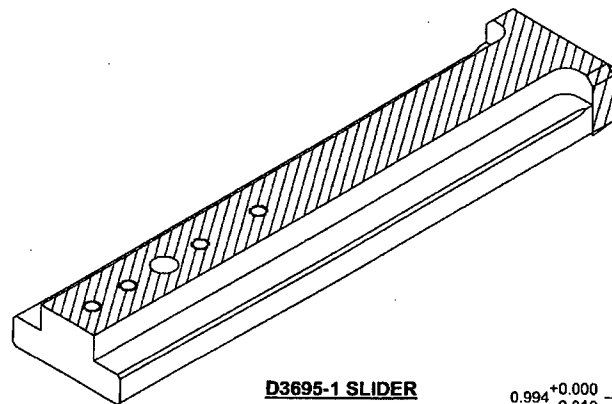
ITEM	QTY	P/N	DESCRIPTION
	X	D3695-041	SLIDER ASSEMBLY
1	1	D3695-1	SLIDER
2	1	D3695-3	STOPPER
3	1	D3801-1	HAND RETRACTABLE SPRING PLUNGER
4	4	MS21209F1-20	HELI-COIL, SCREW LOCKING (RED)
5	1	MS21209F6-25	HELI-COIL, SCREW LOCKING (RED)
6	4	MS24693-C276	SCREW

RELEASED
2012-07-16

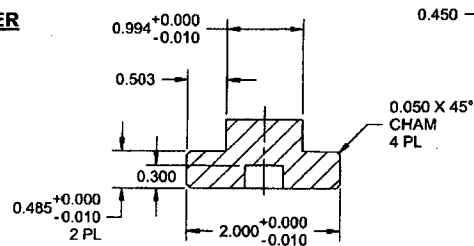
E	ADDED R0.93 (ZN C8-3). REASON: PAR12-177.	MB	12.05.27
D	NOTE 6 UPDATED PER QSI. DIM 0.894 WAS 1.000 & 0.500 WAS 0.500 (ZN C8-2). REF NCR 10-324. CHAMFER ADDED TO D3695-1 (ZN C5-2)	JPH	10.09.24
C	UPDATED BOM TO CURRENT STANDARDS; REVISED ITEM 12 (ZN D3-1); DIMS 1.83 AND 1.075 WERE 1.81 AND 1.063 (ZN B8-3 AND C4-3). REASON: COMPENSATE FOR PAINT THICKNESS AND ELIMINATE RATTLE UPON ASSEMBLY.	MB	08.11.04
B	P/N D3801-1 WAS WIP-510 (ZN C7-1 AND D3-1). REASON: PURCHASED PARTS NOW PROCURED THROUGH D3801 SPEC CONTROL DRAWING	MB	08.06.26
A	NEW ISSUE	MB	08.03.14
REV.	DESCRIPTION	BY	DATE

DESIGN	DART AEROSPACE LTD	REV. E
DRAWN	HAWKESBURY, ONTARIO, CANADA	SHEET 1 OF 3
CHECKED	D3695	SCALE
MFG. APPR.	TITLE	NTS
APPROVED	SLIDER ASSEMBLY	
DE APPR.		
DATE	12.06.27	

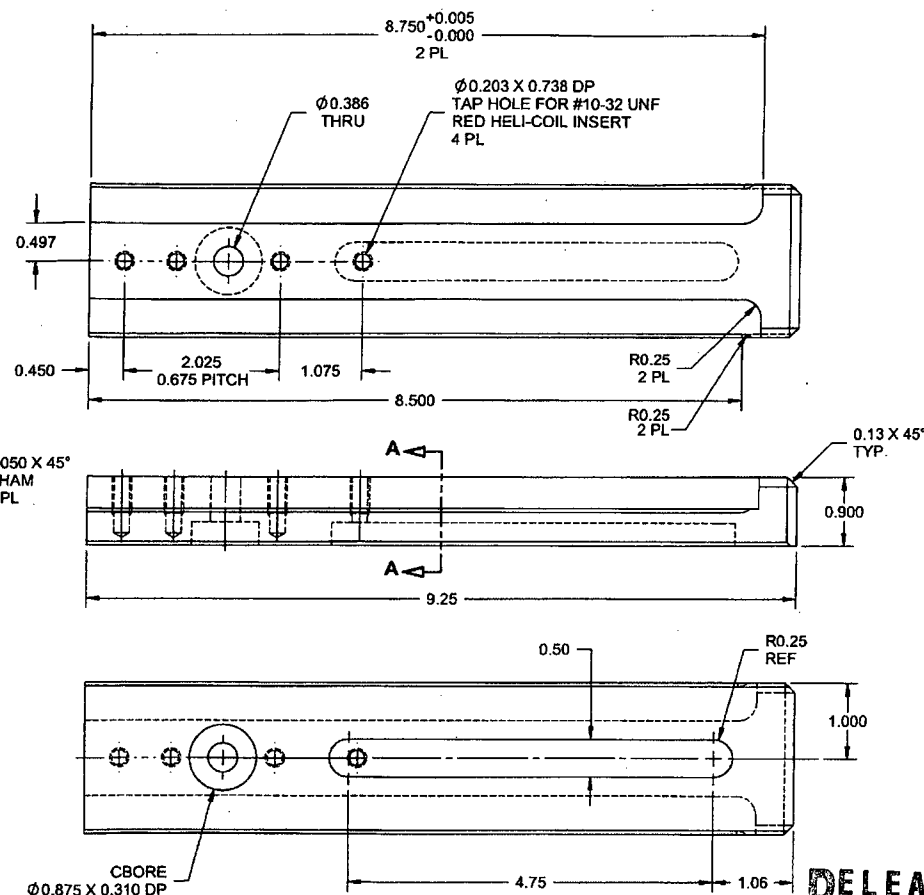
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D3695-1 SLIDER



SECTION A-A

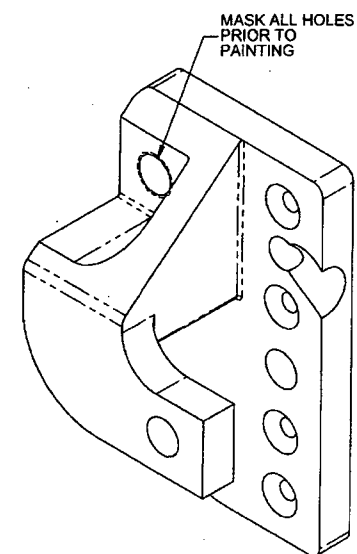
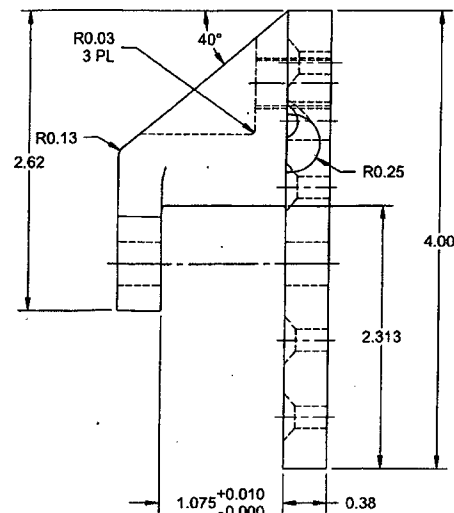
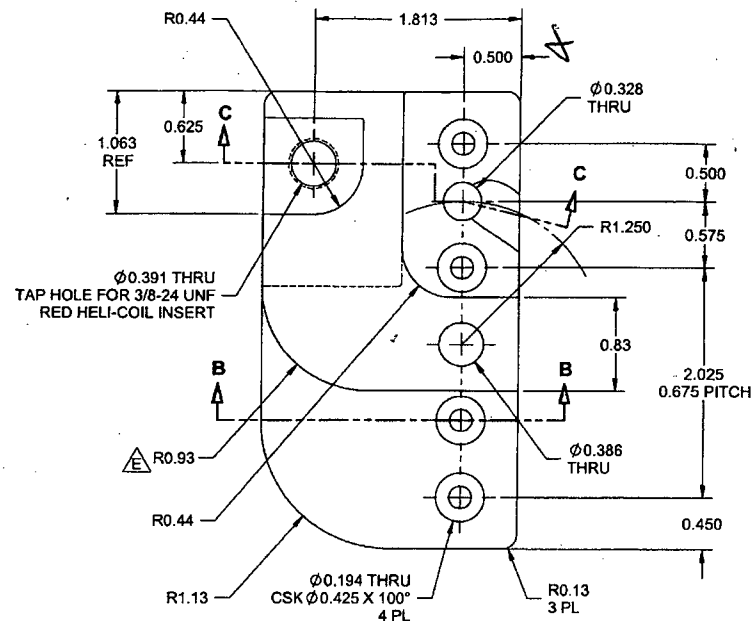


D3695-1 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/-T6510/-T6511/-T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANDEX (4.3.5.6) PER DART
QSI 005 4.3 - MASK ALL HOLES AND UNHATCHED AREAS
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.43lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3695	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
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2012-07-16

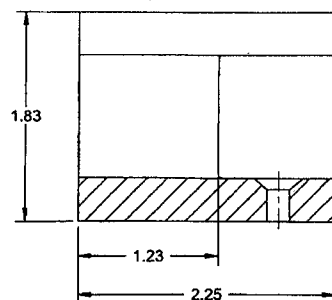


D3695-3 STOPPER

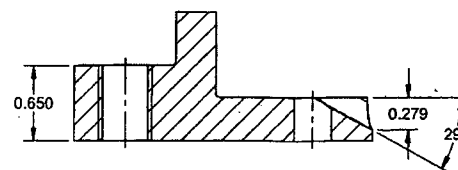
RELEASED
2012-07-16

D3695-3 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/-T6510/-T6511/-T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART
QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs



SECTION B-B



SECTION C-C

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3695	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
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DART AEROSPACE LTD		Work Order:	146201
Description: Slider		Part Number:	D3695-3
Inspection Dwg: D3695 Rev: E		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.625	+/-0.010	.625	/		Vern	FK-04
1.063	+/-0.010	1.061	/		H-G.	31006.
Ø0.391	+0.006/-0.001	.391	/		Vern	FK-04
Ø0.194	+0.005/-0.001	.194	/		"	"
Ø0.425 x 100°	+/-0.010 x 0.5°	.420 x 100°	/		"	"
Ø0.386	+0.006/-0.001	.387	/		"	"
0.450	+/-0.010	.451	/		"	"
2.025	+/-0.010	2.025	/		"	"
0.83	+/-0.010	.830	/		"	"
0.575	+/-0.010	.575	/		"	"
0.500	+/-0.010	.500	/		"	"
Ø0.328	+0.006/-0.001	.328	/		"	"
0.500	+/-0.010	.506	/		"	"
1.813	+/-0.010	1.821	/		"	"
2.62	+/-0.030	2.616	/		H-G.	31006.
1.075	+0.010/-0.000	1.079	/		Vern	FK-04
0.38	+/-0.030	.370	/		"	"
2.313	+/-0.010	2.312	/		"	"
4.00	+/-0.030	4.001	/		"	"
1.83	+/-0.030	1.836	/		"	"
1.23	+/-0.030	1.216	/		"	"
2.25	+/-0.030	2.250	/		"	"
0.650	+/-0.010	.653	/		"	"
0.279	+/-0.010	.279	/		"	"

Measured by: DAS 44 9-89		Audited by: DAS 14 9-89		Preliminary Approval:	
Date: 16-05-18		Date: 16/05/30		Date:	

Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	
B	13.06.27	Dwg Rev updated	KJ	